Luis Angel Espino Cervantes

Luisespinocervantes@gmail.com • (650) 465-9992 • luwuis.github.io/Portfolio/

Education

University of California, Irvine   **June 2022**

Bachelor of Science in Computer Science   GPA: 3.18 (Dean's List UC Irvine • 5 quarters)

Course Work: Software Design • Game Systems and Design • Data Management • Computer Vision & Graphics

Work Experience

Autonomous Vehicle Operator: Zoox   **October 2022-Present**

Safely monitor L3 autonomous vehicles during testing sessions. Record traffic data for the AI to increase vehicle driving performance. Identify and correct malfunctions in the software and write troubleshooting feedback.

Instructor: Juni Learning   **April 2022-October 2022**

Teach Computer Science concepts using python to K-12 students in remote one-on-one sessions.

Office Intern: San Mateo County Health Clinic   **June 2018-September 2018**

Front desk attendant responsible for checking-in patients, updating personal information, facilitating their visits, and answering the main phone. Multitask taking care of the waiting room, printer refills, and faxes.

Projects

Water Simulator (Collision and Blinn-Phong Lighting)   **April 2022-June 2022**

Water Simulator is a **WebGL** scene rendering a water surface that supports collision and Blinn-Phong lighting. It renders two cubes that interact with the surface to show the water features.

- Researched physics on water collision with hard objects and implemented a system to mimic it in **WebGL**.
- Introduced Blinn-Phong lighting on the scene objects. I added reflection and fresnels effect to the water plane.
- Adapted simulation into a webpage using **JavaScript** and **HTML** for public interaction.

Image Recognition Software   **January 2022-February 2022**

AI algorithm that learns the Histogram of Gradient Orientations of an object by using positive and negative picture samples. It then can identify the same object in static images.

- Created software that is able to recognize specific objects in pictures with a 95% success rate.
- Wrote the function algorithm that learns an object's features from a series of sample images.
- Coded, tested, debugged, and finalized the software using **Python**, **Matplotlib**, and **Numpy** libraries.

Spotify Browser   **February 2022**

Website that searches Spotify's database in real-time. Each search creates a new custom page based on the retrieved data from Spotify's API.

- Constructed front-end features to display album, track, or artist searches using **HTML**, **CSS**, and **Angular** components to enhance User Interaction.
- Build the back-end API handling for each search request using **Express.js** and the OAuth protocol.

Vaccine Dash (Videogame) Website   **September 2021-December 2021**

A single-player adventure horror web game designed and developed by a team of five. The game consists of finding vaccines in a covid-filled dark hospital.

- Integrated player controls and physics of the game, as well as visuals and audio effects into the game levels.
- Developed a narrative for the game's story which added relatability to the player.
- Introduced the game and features in a mock product pitch.

Sleep Tracker (Mobile App)   **January 2022**

Software that records the user's sleeping cycle and sleepiness throughout the day.

- Employed Content Prioritization, Intuitive Navigation, Error prevention, and other **UX/UI** principles.
- Rigorously unit tested the code for **IOS** and **Android** using **Ionic Lab**.
- Developed and designed the app using **Javascript** and **HTML** with the **Ionic** library.

Languages	Python • HTML • C • C++ • SQL • JavaScript • WebGL • MatLab • Unreal • IonicJS • Linux • A-Frame
Skills	Project Management • Attention to Detail • Multitasking • Microsoft Office • Biliterate (Spanish)